Department of Biology and Ecology, Faculty of Sciences and Mathematics University of Nis Institute for Nature Conservation of Serbia

ABSTRACTS

14th Symposium on the Flora of Southeastern Serbia and Neighboring Regions Kladovo 26 to 29 June 2022

> 14. Simpozijum o flori jugoistočne Srbije i susednih regiona Kladovo 26. do 29. jun 2022.

Niš-Belgrade, 2022

Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš Institute for Nature Conservation of Serbia

14th Symposium on the Flora of Southeastern Serbia and Neighboring Regions

Kladovo, 26th to 29thJune, 2022

Abstracts

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PROGRAMME

Sunday, June 26th, 2022

12.00-15.00 Registration

15.00-16.00 Opening Ceremony

16.00-16.30 Plenary Session

16.30-17.00 Coffee break

17.00-18.30 Session 1 and Session 2

Hall 1

Phytogeography, Floristics and Phytoecology

Hall 2

Taxonomy and Systematics

Monday, June 27th, 2022

9.00-10.30 Session 3 and Session 4

Hall 1

Phytogeography, Floristics and Phytoecology

Hall 2

Taxonomy and Systematics

10.30-11.00 Coffee break

11.00-13.00 Session 5 and Session 6

Hall 1

Ecology and Environmental Protection

Hall 2

Agriculture, Forestry and Landscape Architecture,

Genetics, Selection and Biotechnology, Zoology

Poster Session 1

15.00-16.30

Taxonomy and Systematics,

Phytogeography, Floristics and Phytoecology,

Nature Protection

Poster Session 2

17.00-18.30

Agriculture, Forestry and Landscape Architecture,

Genetics, Selection and Biotechnology, Zoology,

Ecology and Environmental Protection

Panel discussion

19.00-20.00

Tuesday, June 28th, 2022

9.00-11.00 Session 7 and Session 8

Hall 1

Phytochemistry and Phytotherapy

Hall 2

Nature Protection

Poster Session 3a

11.30-13.00

Phytochemistry and Phytotherapy

13.00-13.30 Pause

Poster Session 3b

13.30-15.00 Phytochemistry and Phytotherapy 15.00-16.00 Lunch break 16.00 Excursion (Danube boat ride) 21.00 Conference dinner

Wednesday, June 29th, 2022

08.00-09.00 Breakfast 09.00-09.30 Closing ceremony 10.00 Check out

Radical scavenging capacity and total phenolic content of *Ajuga laxmannii* (Murray) Benth.

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Ajuga laxmannii (Murray) Benth. (Lamiaceae) is an herbaceous plant, distributed in dry regions of Central and Southeast Europe. It's traditionally used as a galactagogue and for the treatment of inflammation and respiratory infections. The aim of this study was to analyze antioxidant capacity and total phenols and flavonoid contents (TPC and TFC) of 70% ethanol extract of this species. All measurements were performed spectrophotometrically. The antioxidant potential was evaluated using the DPPH and ABTS radical scavenging method. Butylated hydroxyanisole (BHA), α -tocopherol and L-ascorbic acid were used as reference standards. The results obtained by the DPPH test indicated IC_{50} values of 0.564 mg/ml, while IC_{50} using the ABTS test was 1.810 mg/ml. They were compared to the control substances which indicate activity of BHA (IC₅₀=0.129; IC₅₀=0.090mg/ml), α -tocopherol (IC₅₀=0.152; IC₅₀=0.310 mg/ml) and L-ascorbic acid (IC₅₀=0.067; IC₅₀=0.110 mg/ml), respectively. TPC at 101.068 mg GAE/g DW and TFC at 48.946 mg QE/g DW were in correlation with their high antioxidant capacity. These findings indicate that ethanol extract obtained from aerial parts of A. *laxmannii* possessed significant radical scavenging activity and suggest that it could be recognized as potential source of antioxidant ingredients for the food and pharmaceutical industry.

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